

PART V--SEDIMENT CLEANUP STANDARDS

WAC 173-204-500 Sediment cleanup decision process and policies.

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(1) Purpose. This section describes the cleanup decision process and associated policies and principles. If there are any inconsistencies between this section and a specifically referenced section, the specifically referenced section shall govern.

(2) Cleanup decision process. In general, the process for cleanup of contaminated sediments includes the following steps:

- (a) Identifying sediment station clusters of potential concern (WAC 173-204-510);
- (b) Identifying cleanup sites for potential further evaluation (WAC 173-204-520);
- (c) Evaluating sites identified in (b) of this subsection (WAC 173-204-530);
- (d) Determining the appropriate cleanup authority (WAC 173-204-540);
- (e) Conducting a remedial investigation and feasibility study (WAC 173-204-550);
- (f) Determining the applicable sediment cleanup standard (WAC 173-204-560);
- (g) Selecting a cleanup action (WAC 173-204-570);
- (h) Documenting the cleanup action decision and soliciting public review of that decision (WAC 173-204-580); and
- (i) Where necessary, authorizing a sediment recovery zone (WAC 173-204-590).

(3) Coordination with other laws. The cleanup process and procedures under this chapter and under other laws may be combined. Sediment investigations and cleanups conducted in compliance with this chapter shall be presumed to also meet the substantive requirements in Chapter 173-340 WAC. For example, a remedy selected under WAC 173-204-570 is presumed to meet the requirements in WAC 173-340-360.

(4) Cleanup process expectations. The department has the following expectations regarding the cleanup process at sediment sites. The department recognizes there may be sites where cleanup actions conforming to these expectations are not appropriate:

- (a) Scale of cleanups. Sediment contamination can be widespread with multiple

contaminants caused by multiple sources that have been intermingled and dispersed over a wide area by natural processes and human activity. It is the department's intent to address this widespread contamination using multiple approaches that lead to cleanup as effectively and efficiently as possible. This may include:

(i) The use of partial cleanups of a site through cleanup of a "sediment cleanup unit(s)" (see definition in WAC 173-204-200) that serve to provide more expeditious cleanup in portions of larger sites in a manner that is consistent with broader scale cleanup strategies;

(ii) Coordinating cleanup of multiple sites and sediment cleanup units on a bay-wide, area-wide, or watershed-wide scale; and

(iii) Use of aggressive source control measures to minimize future contamination.

(b) Recontamination. Recontamination of sediment at remediated sites or sediment cleanup units may occur from ongoing discharges. It is the department's expectation that further cleanup of recontamination will not be required by the person(s) conducting the initial cleanup when the person(s) can demonstrate that the recontamination is caused by an upland source or a permitted release not under the authority or responsibility of the person(s) conducting the initial cleanup.

(c) Cleanup time frame. The department expects that the sediment component of sites and sediment cleanup units with limited contamination will be restored within a single construction season using active cleanup methods such as dredging or capping. The department recognizes sediment cleanups with more extensive contamination may have to occur over a longer time frame due to the nature and extent of contamination and the cleanup technology used. In these latter cases, it is the department's expectation that most of these sites will use active cleanup technologies, in combination with more passive technologies, to achieve restoration as soon as practicable following completion of active cleanup. The department recognizes that longer restoration time frames may be necessary in cases such as areas with widespread contamination of ubiquitous chemicals from numerous point and nonpoint source discharges. In these cases a sediment recovery zone may apply.

(d) Sediment recovery zones. The department expects that sediment recovery zones will be used where it is clear that a ten (10) year restoration timeframe is not practical. At these sites the department expects the sediment recovery zone will be managed in accordance with WAC 173-204-590.

(e) Compliance monitoring. The department expects that post-cleanup monitoring will be conducted at cleanup sites and sediment cleanup units to verify compliance with approved cleanup standards. Monitoring will typically include sediment chemistry and bioassays at a minimum but may also include tissue analysis, pore water and surface water testing, and more intense discharge monitoring than would normally occur under a discharge permit where circumstances warrant.

(f) Scope of information. The scope of information needed to adequately characterize different site or sediment cleanup units will vary depending on site conditions and complexity. It is the department's expectation that sufficient information will be gathered in as few sampling events as feasible to enable appropriate decisions and cleanups to proceed expeditiously.

(g) Timely decisions. The department shall endeavor to make sediment cleanup decisions in an expeditious manner, as soon as all information required by the department is available,

consistent with the availability of department resources and the priority of the cleanup site.

(5) Relationship between the sediment cleanup objective, sediment cleanup standards, maximum allowable level, and cleanup actions. It is the policy of the department to select sediment cleanup standards and cleanup actions that support the goal of reducing and ultimately eliminating adverse effects on biological resources and unacceptable risks to human health from sediment contamination.

(a) Sediment cleanup objective. The sediment cleanup objective defines the chemical concentrations and biological effect levels that are the goal for protection of human health and environment. WAC 173-204-560 establishes methods and policies for establishing the sediment cleanup objective based on protecting human health and the environment. In some cases, the sediment cleanup objective based on risk to human health and the environment may be below natural background levels or levels that can be reliably measured. In these situations, the sediment cleanup objective can be established at a concentration equal to the practical quantitation limit or natural background, whichever is higher. The department expects the sediment cleanup objective for a site to be reached through cleanup actions and source control.

(b) Maximum allowable level. The maximum allowable level defines the maximum chemical concentrations and biological effect levels for establishing cleanup standards and identification of potential cleanup sites. WAC 173-204-560 establishes methods and policies for the maximum allowable level based on protecting human health and the environment. In some cases, the maximum allowable level based on risk to human health and the environment may be below regional background levels or levels that can be reliably measured. In these situations, the maximum allowable level can be established at a concentration equal to the practical quantitation limit or regional background, whichever is higher.

(c) Sediment cleanup standards. WAC 173-204-560 establishes requirements for sediment cleanup standards. Sediment cleanup standards define the chemical concentrations and biological effects levels that protect human health and the environment to be achieved as soon as practicable after completion of the active cleanup. Sediment cleanup standards shall be established within a range bounded by the sediment cleanup objective and the maximum allowable level using the sediment cleanup objective as a baseline and adjusting upward based on consideration of what is technically possible and net environmental effects.

(d) Cleanup actions. WAC 173-204-570 establishes requirements for cleanup actions. Most cleanup actions consist of a combination of technologies to achieve sediment cleanup standards within the biologically active zone. Cleanup technologies include:

(i) Active cleanup actions. Sediment contamination may be addressed by active cleanup actions such as dredging, capping, treatment, and enhanced natural recovery. Active cleanup actions are preferred over passive cleanup actions.

(ii) Passive cleanup actions. Passive cleanup actions such as monitored natural recovery and institutional controls may be used in combination with active cleanup actions and source control measures to address sediment contamination.

(iii) Source control. Source control measures consist of controlling ongoing sources including wastewater discharges or stormwater discharges to limit discharges of contaminants that accumulate in sediment. Source control measures will be a necessary component of many effective cleanups and to reduce the risk of recontamination.

(6) Applicability of new cleanup standards.

(a) The department shall determine the standards that apply to a site or sediment cleanup unit based on the rules in effect under this chapter at the time the department issues a final cleanup action plan or similar decision document as described in WAC 173-204-580.

(b) A site cleaned up with cleanup standards determined in (a) of this subsection shall not be subject to further cleanup action due solely to subsequent amendments to the provisions in this chapter on cleanup standards, unless the department determines on a case-by-case basis that the previous cleanup action is no longer sufficiently protective of human health and the environment.